

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant(s): Reid et al.  
Serial No. : 10/586,291  
For: SECURITY SUBSTRATE INCORPORATING ELONGATE SECURITY  
ELEMENTS  
Filed: March 14, 2007  
Examiner: Justin V. Lewis  
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Attorney Docket No.: 0002978USU/2297

**Mail Stop APPEAL BRIEF - PATENTS**  
**Commissioner of Patents**  
**P.O. Box 1450**  
**Alexandria, VA 22313-1450**

**REPLY BRIEF**

Dear Sir:

In response to the Examiner's Answer dated August 17, 2011, Appellants are filing this Reply Brief in accordance with the provisions of 37 C.F.R. §41.41.

**Status of the Claims**

Claims 4, 8, and 23 have been cancelled. Claims 1-3, 5-7, 9-22, and 24-34 are pending in this application, and are the subject of this Appeal. Claims 1, 18, and 33 are independent.

Independent claims 1, 18, and 33, as well as dependent claims 2-3, 5-7, 9-10, 19-22, 24, 30-32, and 34, stand rejected under 35 U.S.C. §103(a) over U.S. Patent Publication No. 2003/0104176 to Schwenk ("Schwenk"). Dependent claims 11-17 and 25-29 stand rejected under 35 U.S.C. §103(a) over Schwenk in view of U.S. Patent No. 6,471,247 to Hardwick et al. ("Hardwick").

Independent claims 1, 18, and 33, as well as dependent claims 2-3, 5-7, 9-10, 19-22, 24, 30-32, and 34, stand rejected under 35 U.S.C. §103(a) over U.S. Patent No. 4,290,630 to Lee ("Lee"). Dependent claims 11-17 and 25-29 stand rejected under 35 U.S.C. §103(a) over Lee in view of Hardwick.

**Grounds of Rejection to be Reviewed on Appeal**

The first ground presented for review is the propriety of the rejection of claims 1-3, 5-7, 9-22, 24, and 30-34 under 35 U.S.C. §103(a) over Schwenk.

The second ground presented for review is the propriety of the rejection of claims 1-3, 5-7, 9-22, 24, and 30-34 under 35 U.S.C. §103(a) over Lee.

## **Arguments**

### **(a) First Ground over Schwenk**

#### *(1) Claims 1-3, 5-7, and 9-17 and 24-34 stand or fall together*

Claim 1 requires, in part, “at least two security elements” that are “at least partially embedded within said substrate” and “run substantially parallel to each other” (emphasis added).

Simply stated, Schwenk discloses two distinct components: "mottled fibers" and "control areas".

The "mottled fibers" of Schwenk are not disclosed or suggested as being **parallel** to one another, but rather are disclosed in the figures as being **randomly placed** within the "control areas".

Further, the "control areas" of Schwenk are not disclosed or suggested as being **embedded** within the substrate, but rather are merely imaginary "areas" of the substrate. To that end, Schwenk specifically discloses that: the boundary lines of the strip-like subareas 5a, 5b, 5c are illustrated by continuous lines where these continuous lines "serve merely for illustration and are not present on an actual security document" (emphasis added) (page 2-3, para. 0035).

Thus, Schwenk discloses imaginary "control areas" that run parallel to each other but without any portion being embedded, while disclosing "mottled fibers" that are embedded within the substrate but do not run parallel to each other. However, no portion of Schwenk discloses or suggests security elements that are both "partially embedded" and "parallel" as claimed.

Moreover, Appellants maintain that the claimed partially embedded and parallel elements are placed with respect to each other by a specific gap and zone width, which yield much more than a predictable result as set forth in the disclosure of the present application at least at page 4, lines 14-

22. The claimed gap and zone width have been very carefully selected to provide the intended visual impact, whereas the cited art fails to recognize these variables as being necessary for such a result.

Schwenk fails to disclose the claimed ranges and fails to disclose or suggest result provided thereby.

The Examiner's Answer still presents no line of reasoning, and we know of none, as to who one skilled in the art is or why that person viewing the collective teachings of Schwenk would have found it obvious to selectively pick and choose various gap and zone widths to arrive at the claimed invention.

Thus, for the reasons provided above and in the Appellants' Appeal Brief, Schwenk, alone, or in combination with Hardwick, does not disclose or suggest claim 1 or claims 2-3, 5-7, and 9-17 that depend therefrom. Accordingly, Appellants respectfully request, with regard to Schwenk, alone, or in combination with Hardwick, that the Board of Appeals reverse the rejection of claims 1-3, 5-7, and 9-17.

(2) Claims 18-22 and 24-34 stand or fall together

Claim 18 requires, in part, "at least two elongate security threads" that are "at least partially embedded within said substrate" and run "substantially parallel to each other" (emphasis added). Similarly, claim 33 requires, in part, "a first elongate security thread" and "a second elongate security thread" that are "at least partially embedded within said substrate" and "run substantially parallel to each other" (emphasis added) .

Contrary to the "security elements" of claim 1, claims 18 and 33 require "security threads" and such threads are not disclosed or suggested by Schwenk.

Again, Appellants maintain that neither the “control areas” nor the “mottled fibers” of Schwenk can reasonably be considered to both be partially embedded and substantially parallel as in claims 18 and 33.

Again, Schwenk discloses imaginary "control areas" that run parallel to each other but without any portion being embedded, while disclosing "mottled fibers" that are embedded within the substrate but do not run parallel to each other. No portion of Schwenk discloses or suggests the security threads of claims 18 and 33.

Still further, claims 18 and 33 each require a gap and a total cross-directional width, which yield much more than a predictable result as set forth in the disclosure of the present application at least at page 4, lines 14-22. The claimed gap and total cross-directional width have been very carefully selected to provide the intended visual impact, whereas the cited art fails to recognize these variables as being necessary for such a result. Schwenk fails to disclose the claimed ranges and fails to disclose or suggest result provided thereby.

The Examiner's Answer still presents no line of reasoning, and we know of none, as to who one skilled in the art is or why that person viewing the collective teachings of Schwenk would have found it obvious to selectively pick and choose various gap and total cross-directions widths to arrive at the claimed invention.

Thus, for the reasons provided above and in Appellants' Appeal Brief, Schwenk alone or, in combination with Hardwick, does not disclose or suggest claims 18 and 33 or claims 19-22, 24-32, and 34 that depend therefrom. Accordingly, Appellants respectfully request that, with regard to Schwenk, or Schwenk in combination with Hardwick, the Board of Appeals reverse the rejection of claims 18-22 and 24-34.

**(b) Second Ground over Lee**

(1) Claims 1-3, 5-7, 9-22, and 24-34 stand or fall together

The Examiner's Answer maintains that Lee discloses more than one thread. Appellants maintain that such a position is a clear misconstruction of the plain language of Lee.

The only portion of Lee asserted by the Examiner to support the contention that Lee discloses more than one thread in a single document reads as follows:

"The threadss 2, after separation, may be cut into suitable lengths which are then inserted into or affixed to the surface of the sheet material of the documentss concerned (emphasis added)."  
See col. 3, lines 48-51.

This passage, when taken in light of the overall disclosure of Lee, makes clear that the use of the plural "threadss" and the plural verb "are" are merely used to conform these terms to the fact that this sentence is directed to multiple "threadss" in multiple "documentss" and not to multiple threads within a single document. There is simply no disclosure or suggestion in Lee that multiple threads are placed in a single document. The Office Action's interpretation of this passage ignores the plain language of the reference.

Additionally, the Examiner continues to point to Figure 5 as support for multiple threads in a single document. However, Figure 5 clearly shows a single thread in a single document. The Examiner has simply misinterpreted the two edges of a single thread as being separate threads, which is simply erroneous and unsupported.

Even if one were to assume that Lee has two threads in one document or that mere duplication of the single thread were obvious, Appellants maintain that Lee fails to disclose or suggest that these threads are embedded "parallel" to one another as claimed.

The Office Action and subsequent Interview asserted that Figures 3a-g of Lee illustrate parallel threads in a single document based on the perception that Figures 3a-3g, when viewed in combination with one another, illustrate threads embedded parallel to one another.

The Examiner's Answer now appears to back away from this clearly erroneous position. Rather, the Examiner's Answer now asserts that the disclosure of Figure 5 somehow suggests that a second, third, etc. security thread would be placed parallel to the first thread since any other positioning would interfere with one's ability to read the edge formations of the threads.

The Examiner is simply using one misconception of Lee to justify another. Figure 5 plainly shows a single thread with two edges. There is nothing in this figure, nor in the disclosure of Lee, that would lead one to place multiple threads in the document. Additionally, there is nothing in this figure, nor in the disclosure of Lee, that would lead one to place multiple threads parallel to one another. To that end, there is also nothing in Lee to suggest that the interference with the ability to read the edge formations is to be avoided in the manner suggested by the Examiner's Answer.

Simply stated, Lee only shows one thread in one document and if one were to simply duplicate this thread, there is no teaching or suggestion in Lee that such a thread should be parallel to the other threads in the manner claimed.

Still further, even if one were to somehow happen upon placing multiple threads in a single document, and to arrange these threads parallel to one another, there is also no teaching or suggestion that the parallel threads be positioned with the specific gap required by the claims, where the claimed gap does much more than yield a predictable results as set forth in the disclosure of the present application at least at page 4, lines 14-22.

Thus, for the several reasons provided above and in more detail in Appellants' Appeal Brief, Lee, alone, or in combination with Hardwick, fails to disclose or suggest independent claims 1, 18, or 33, and dependent claims 2-3, 5-7, 9-17, 19-22, 24-32, and 34 that depend therefrom. Accordingly,



Appellants respectfully request that, with regard to Lee, alone, or in combination with Hardwick, the Board of Appeals reverse the rejection of claims 1-3, 5-7, 9-22, and 24-34.

Summary

In summary, Appellants respectfully request that the Board of Appeals reverse the rejections of claims 1-3, 5-7, 9-22 and 24-34, thereby enabling all of the pending claims to be allowed.

Respectfully submitted,

October 17, 2011

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